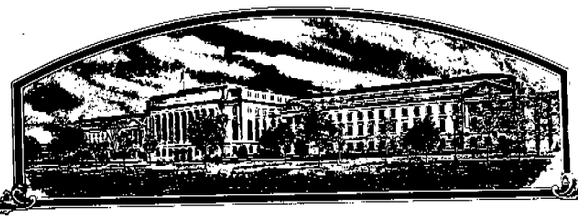

No. 7600006

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

FFR Cooperative

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT ETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT T. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'FFR 444'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 20th *day of* September *in the year of our Lord one thousand nine hundred and* seventy-eight

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
FFR 444	Soybean	PV NUMBER 7600006
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 8-20-75 / TIME 2:30 P.M.
Glycine max	Leguminoseae	FEE RECEIVED $250.00 / $250.00 / $250.00
	5. DATE OF DETERMINATION: October, 1972	BALANCE DUE $ — / 11-18-78 / 6-12-78

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
FFR Cooperative	4112 East State Road 225 West Lafayette, Indiana 47906	317-567-2115

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Wisconsin	March 11, 1960

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

G. Robert Taylor
Soybean Breeder
FFR Cooperative
4112 East State Road 225
West Lafayette, Indiana 47906

R. J. Buker, Ph.D.
Executive Vice President & General Manager
FFR Cooperative
4112 East State Road 225
West Lafayette, Indiana 47906

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Botanical Description of the Variety
- [X] 13C. Exhibit C, Objective Description of the Variety
- [X] 13D. Exhibit D, Data Indicative of Novelty
- [X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO RLS

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [XX] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [X] FOUNDATION [X] REGISTERED [X] CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

16 July 1975 (DATE) — G Robert Taylor (SIGNATURE OF APPLICANT) 1

(DATE) — (SIGNATURE OF APPLICANT)

FFR COOPERATIVE
4112 E. State Road 225
W. Lafayette, IN 47906
317- 567-2115

May 9, 1978

Dr. Robert J. Snyder
Examiner, Plant Variety Protection Office
Agricultural Marketing Service
Grain Division
United States Department of Agriculture
National Agricultural Library Building
Beltsville, Maryland 20705

PV #7600006

Dear Dr. Snyder:

In compliance with your letter of May 3, 1978, the following revised exhibits A, B and D are submitted for Soybean application No. 7600006 FFR 444.

Exhibit A

FFR 444 is a variety selected from a cross of Wayne x Kent. Seed of the varieties used in this cross were obtained from Dr. R. L. Cooper and Dr. R. L. Bernard of the Regional Soybean Laboratory, Urbana, Illinois. F_1s were grown in the greenhouse and selections were made in the F_2 generation in the field in 1969. Reselections within these lines were made in 1970 with from 1 to 7 plants bulked to form new lines. First yield tests were made on 951194 (experimental designation) in 1971 at Brookston, Indiana--see Table 1. Purification for plant type and growth habit were made in Virginia in 1972, Indiana and Ohio in 1973, and in Ohio in 1974. Initial increases were made in 1972 with subsequent rogueing in 1973 and 1974.

White flowered variants have been in this variety during its multiplication. These have accounted for approximately 3.5% of the flowers of the variety. All white flowered plants were removed from Breeders Seed lots in 1977. No other indications of off-types have been noticed in this variety - it has been stable for all characteristics other than flower color.

PV# 7600006

Exhibit B

This variety has purple flowers and will show purple pigmentation on the hypocotyls of the seedlings. The seed and seedling characteristics are similar to Wayne and Kent; i.e. yellow seed with black hila. The plants have tawny pubescence and brown pods.

The mature plants resemble the variety Kent in general appearance; however, the leaves are slightly larger and plants shorter than Kent. FFR 444 matures 5 days earlier than Kent, has slightly stronger terminals and fewer branches.

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.

13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

FORM GR-470-2
(6-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Soybean)

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (*GLYCINE MAX*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
FFR Cooperative

ADDRESS *(Street and No., or R.F.D. No.; City, State, and ZIP Code)*
4112 E. State Road 225
West Lafayette, IN 47906

FOR OFFICIAL USE ONLY

PVPO NUMBER
7600006

VARIETY NAME OR TEMPORARY DESIGNATION
FFR 444

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. SEED SHAPE: [2] 1 = SPHERICAL 2 = SPHERICAL FLATTENED 3 = ELONGATE 4 = OTHER *(Specify)*

2. SEED COAT COLOR: [1] 1 = YELLOW 2 = GREEN 3 = BROWN 4 = BLACK 5 = OTHER *(Specify)* ____ **SHADE:** [2] 1 = LIGHT 2 = MEDIUM 3 = DARK

3. SEED COAT LUSTER: [1] 1 = DULL 2 = SHINY

4. SEED SIZE [17.7] GRAMS PER 100 SEEDS

5. HILUM COLOR: [6] 1 = BUFF 2 = YELLOW 3 = BROWN 4 = GRAY 5 = IMPERFECT BLACK 6 = BLACK 7 = OTHER *(Specify)* ____ **SHADE:** [2] 1 = LIGHT 2 = MEDIUM 3 = DARK

6. COTYLEDON COLOR: [1] 1 = YELLOW 2 = GREEN

7. LEAFLET SIZE *(See Reverse)*: [2] 1 = SMALL 2 = MEDIUM 3 = LARGE

8. LEAFLET SHAPE: [1] 1 = OVATE 2 = OBLONG 3 = LANCEOLATE 4 = ELLIPTICAL 5 = OTHER *(Specify)* ____

9. LEAF COLOR *(See reverse)*: [2] 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK GREEN

10. FLOWER COLOR: [2] 1 = WHITE 2 = PURPLE 3 = OTHER *(Specify)* ____

11. POD COLOR: [2] 1 = TAN 2 = BROWN 3 = BLACK

12. POD SET: [2] 1 = SCATTERED 2 = CONCENTRATED

13. PLANT PUBESCENCE COLOR: [2] 1 = GRAY 2 = BROWN 3 = OTHER *(Specify)* ____ **SHADE:** [2] 1 = LIGHT 2 = MEDIUM 3 = DARK

14. PLANT TYPES *(See Reverse)*: [3] 1 = SLENDER 2 = BUSHY 3 = INTERMEDIATE

15. PLANT HABIT: [2] 1 = DETERMINATE 2 = INDETERMINATE 3 = OTHER *(Specify)* ____

16. HYPOCOTYL COLOR: [2] 1 = GREEN 2 = PURPLE

17. SEED PROTEIN: [ ] 1 = A 2 = B

18. NUMBER OF DAYS TO FLOWERING *(Place a zero in first box (e.g. [0][9]) when days are 9 or less.)* [6][2] R5

19. MATURITY GROUP: [6] 1 = 00 2 = 0 3 = I 4 = II 5 = III 6 = IV 7 = V 8 = VI 9 = VII 10 = VIII

20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT *(Growth Chamber)* **AT 25° C.** *(Place a zero in first box (e.g. [0][2]) when size is 9 mm. or less.)*

[ ][ ][ ] MM. LENGTH OF SEEDLING
[ ][ ] MM. LENGTH OF COTYLEDON
[ ][ ] MM. WIDTH OF COTYLEDON

21. DISEASE: *(Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)*

[0] BACTERIAL PUSTULE	[0] SOYBEAN CYST	[0] DOWNY MILDEW	[0] PURPLE STAIN	[0] POD AND STEM BLIGHT	[0] ROOT KNOT
[0] FROGEYE	[0] STEM CANKER	[1] PHYTO-PHTHORA	[0] BROWN STEM ROT	[0] TARGET SPOT	[0] BROWN SPOT
[0] BUD BLIGHT	[0] WILDFIRE	[0] RHIZOCTONIA ROT	[0] OTHER *(Specify)* ____		

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Exhibit D

FFR 444 is a novel variety differing from all other soybean varieties. It is most similar to Kent but differs in the following ways: 1.) FFR 444 is 5 days earlier than Kent, 2.) FFR 444 has larger leaves than Kent, 3.) FFR 444 is slightly shorter than Kent, 4.) FFR 444 has slightly stronger terminals than Kent, 5.) FFR 444 has fewer branches than Kent.

FFR 444 differs from its other parent, Wayne, in having purple flowers.

Exhibit D

FFR 444 is a novel variety because it matures 5 days earlier than Kent (a purple-flowered parent variety) and has purple flowers (Wayne, the other parent, has white flowers). It is also higher yielding than its parent varieties. FFR 444 is most like Kent in plant structure, but the leaves are slightly larger and it is slightly shorter than Kent. In addition, FFR 444 has slightly stronger terminals and fewer branches than Kent when grown in similar environments. These latter two observations were made by the breeder in field situations as well as yield tests. No numerical comparisons are available at this time.

Sincerely,

G. Robert Taylor (mg)
Soybean Breeder

GRT/mg

cc: Darrel Dirksen

FORM GR-470-2 (REVERSE) PV # 7600006 Received 1/18/78 dm

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Kent	Petiole angle	Kent
Leaf shape	Kent	Seed size	York
Leaf color	Kent	Seed shape	York
Leaf surface	Kent	Seedling pigmentation	Kent

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
Submitted	139	2.2	45			42.6	20.3%	45	
Name of similar variety	Clark 63	Calland	Kent			Beeson	Beeson	Bonus	

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"

7600006

FFR COOPERATIVE
4112 E. State Road 225
W. Lafayette, IN 47906

317-567-2115

Plant Variety Protection Application
FFR 444

13E. Exhibit E

G. Robert Taylor is a soybean breeder for FFR Cooperative. Dr. R. J. Buker is Vice President and Director of Research.

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U.S. DEPARTMENT OF AGRICULTURE

REFERENCE SLIP

DATE 5/31/78

TO Ken

- [ ] ACTION
- [ ] APPROVAL
- [ ] AS REQUESTED
- [ ] FOR COMMENT
- [ ] FOR INFORMATION
- [ ] INITIALS
- [ ] NOTE AND FILE
- [ ] NOTE AND RETURN
- [ ] PER PHONE CALL
- [ ] RECOMMENDATION
- [ ] REPLY FOR SIGNATURE OF ______
- [ ] RETURNED
- [ ] SEE ME
- [ ] YOUR SIGNATURE

REMARKS How about the flower color and hypocotyl color. This is another of Bakers mixtures

L

Can't locate the Exhibit E.

Fixed this up

FROM Ken

Fixed up — R/S

GPO 048—16—83471-1 FORM AD-514 (8-64)

Lease 6/1/78

Exhibit E has
been fixed up.
Ready for certificate
if fixed Ex E is
O.K.
Ken